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(11) EP 0 760 541 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 23.12.1998 Bulletin 1998/52

(51) Int Cl.6: H01R 13/516

(43) Date of publication A2: 05.03.1997 Bulletin 1997/10

(21) Application number: 96650011.8

(22) Date of filing: 19.04.1996

(84) Designated Contracting States: **DE FR NL**

(30) Priority: 25.08.1995 JP 239052/95

(71) Applicants:

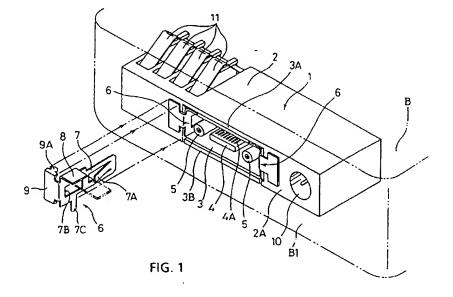
- HIROSE ELECTRIC CO., LTD. Shinagawa-ku Tokyo (JP)
- NOKIA MOBILE PHONES LTD. 02150 Espoo (FI)
- (72) Inventors:
 - Suzuki, Akio, c/o Hirose Electric Co., Ltd. Shinagawa-ku, Tokyo (JP)

- Kobayashi, Hiroyuki, c/o Hirose Electric Co., Ltd. Shinagawa-ku, Tokyo (JP)
- Hellgren, Matti, c/o Nokia Mobile Phones Ltd. Salo, 24101 (FI)
- (74) Representative: Coyle, Philip Aldan et al
 F. R. KELLY & CO.
 27 Clyde Road
 Ballsbridge
 Dublin 4 (IE)

(54) Portable phone composite connector

(57) A portable phone composite connector includes a housing (2) with a connection recess (3) having a rectangular opening on a front surface (2A) thereof which is substantially flush with a surface (B1) of a portable phone. A flat connector (4) is provided within the

connection recess and comprises an insulation plate bearing signal terminals (4A). An RF terminal (5) is provided within the connection recess adjacent to the flat connectors and a reinforcing member (6) is provided for reinforcing a major wall (3A) of the connection recess.





EUROPEAN SEARCH REPORT

Application Number EP 96 65 0011

Category	Citation of document with in of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 190 461 A (OORUI KAZUYA ET AL) 2 March 1993 * column 1, line 7 - line 14 * * column 2, line 22 - line 29 * * column 3, line 27 - line 37 * * figure 3 *		1	H01R13/516
Α	EP 0 591 723 A (MOLEX INC) 13 April 1994 * column 1, line 50 - line 57 * * column 5, line 48 - line 58 * * figures 2,4 *		1,2,4	
A	US 5 234 353 A (SCHOLZ JAMES P ET AL) 10 August 1993 * column 3, line 48 - line 56 * * column 4, line 57 - line 64 * * figure 1 *		1,2	
P , X	EP 0 701 303 A (NOKIA MOBILE PHONES LTD) 13 March 1996 * column 1, line 24 - line 33 * * column 3, line 34 - line 41 * * column 6, line 5 - line 8 * * figures 1.3,6 *		1,3,4	TECHNICAL FIELDS SEARCHED (Int.CI.6) H01R H04M
P,X	DATABASE WPI Week 9548 Derwent Publications Ltd., London, GB; Page 1, AN 95-372095 XP002082257 "compound electrical connector" & JP 07 254453 A (HIROSE DENKI) , 3 October 1995 * the whole document *		1.4	
	The present search report has b			
Place of search THE HAGUE		Date of completion of the search 27 October 1998	Dem	Exammer 01, S
X ; part Y · part docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anoth iment of the same category notogical peckground	7 : theory or print E : earlier patent after the filing or D : document cite L : document cite	tiple underlying the	envention ished on, or